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AUTHOR Kishler, John P.  
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ABSTRACT

An experiment was conducted to study the effect that audience attitude toward, and identification with the main character of a film has on learning from the film. Two hypotheses were formulated. 1) People for whom the occupational role of the main character has a high prestige value will learn more factual information from the film and also change further in attitudes in the direction suggested by the film. 2) People who identify with the main character on the basis of shared institutional affiliation will also learn more and change in attitude toward the direction of the film. The procedure was to show audiences the film "Keys of the Kingdom," in which the hero was a Catholic priest. Before seeing the film, audiences filled out a rank-order scale of occupational prestige and an attitude scale measuring religious tolerance. After seeing the film, audiences filled out these two scales again as well as an information test based on the film. Results showed that the differences found were in the direction predicted by the hypotheses, but very few of them were statistically significant. (Author/JK)

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TECHNICAL REPORT - SDC 269-7-10

THE EFFECTS OF PRESTIGE AND IDENTIFICATION FACTORS ON  
ATTITUDE RESTRUCTURING AND LEARNING FROM SOUND FILMS

(Rapid Mass Learning)

The Pennsylvania State College  
Instructional Film Research Program  
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Investigation Conducted by:

John P. Kishler

FOR THE PENNSYLVANIA STATE COLLEGE:

Dean M. R. Trabue  
Responsible Administrator

C. R. Carpenter  
Program Director

FOR THE SPECIAL DEVICES CENTER

Reviewed for Human Engineering Branch: Submitted:

*J. Gaberman*  
J. Gaberman, Project Engineer

*Fred W. Titler, Cdr, USN*  
for S. Rhoads, Technical Director

Approved:

*C. P. Seitz*  
C. P. Seitz, Head, Code 912

*for Al Bondan, Cdr, USN*  
J. R. Ruhsenberger, Captain, USN  
Commanding Officer and Director

## SUMMARY

### Statement of the Problem

The purpose of this experiment was to study the effect that audience attitude toward, and identification with, the main character of a film has on learning from the film. "Identification" is here defined as a dynamic process of relating oneself to persons and groups, which is measurable in terms of attitudes held towards those persons and groups.

Two hypotheses were formulated for testing:

(1) Individuals for whom the occupational role of the main character of a motion picture has a high prestige value will

(a) learn more factual information from the film, and

(b) change further in attitudes in the direction suggested by the film, than those for whom this occupational role has a low prestige value.

(2) Where an established identification with a main character can be assumed to exist, on the basis of institutional affiliation, those people who possess such affiliation will

(a) learn more, and

(b) change further in attitudes in the direction suggested by the film, than those who have no such affiliation.

### Experimental Procedure

The Film. A dramatic film, Keys of the Kingdom, starring the well-known actor Gregory Peck, in the well defined role of Catholic priest, was selected for the experiment. This film depicts the career of a priest who served as a missionary in China, and develops a theme of religious tolerance through the behaviour and philosophy of the main character.

The Tests and Measures. To evaluate the audiences' potentiality for identification with the main character in the film, two indices were used:

(a) A rank-order scale of the prestige of the role of Catholic priest, on which each individual was required to rank, in order of prestige for him, eleven occupations, among which was Catholic priest.

(b) Affiliation or non-affiliation with the Catholic Church.



To measure the effects of the film three devices were used:

- (1) Two alternate forms of an attitude scale to measure religious tolerance.
- (2) A test on the factual information in the film.
- (3) The rank-order scale of occupational prestige.

The Population. Eight hundred and fifteen college students were used in the experiment. Subsamples were selected as follows:

(a) Prestige subsample. Two groups were selected that were comparable with regard to sex distribution and a measure of scholastic aptitude, but which differed with respect to the ranking they assigned to the occupation of Catholic priest. Every member of one group ranked the occupation of Catholic priest high, the members of the other group ranked it low.

(b) Affiliation subsample. Two groups were selected which were similar on the measure of academic aptitude, but which differed according to membership or non-membership in the Catholic Church.

Method of Testing. The rank-order scale of occupational prestige was administered to the total population followed by one form of the attitude scale on Religious Tolerance. The film "Keys of the Kingdom" was subsequently shown. Then, the same rank-order scale and the alternate form of the attitude scale, as well as the information test based on the film, were given to the total population.

#### Results of the Experiment

(1) The Prestige Hypothesis. The results both for the information test and the attitude scale were in the direction predicted, but the differences between those ranking the role of Catholic priest high and those ranking it low were not significant. However, the high rankers themselves showed a significant change on the religious tolerance attitude scale in the direction predicted while those ranking the role low showed only an insignificant change.

(2) The Affiliation Hypothesis. The group having institutional affiliation with the Catholic Church remembered more about the action of the film, but by an amount that was barely significant. The Religious Tolerance scale revealed no significant difference between Catholics and non-Catholics in amount of attitude change.

Both Catholics and non-Catholics rated the role of Catholic Priest higher after seeing the film, but the difference between the two groups was not significant.

### Conclusions

In general the differences found were in the direction predicted by the hypotheses, but very few of them reached accepted levels of statistical significance. These findings lend support to, but do not establish with a high degree of confidence, the proposition that established attitudes towards a film's main character and theme are matters of importance in the process of learning and the restructuring of attitudes.



**THE EFFECTS OF PRESTIGE AND IDENTIFICATION  
FACTORS ON ATTITUDE RESTRUCTURING  
AND LEARNING FROM SOUND FILMS<sup>1</sup>**

**John Pullman Kishler**

**STATEMENT OF THE PROBLEM**

The purpose of this experiment was to study the effect that audience attitude toward, and identification with, the main character of a film has on learning from the film.

"Identification" was defined in this study as a dynamic process of relating oneself to persons and groups. "Identification" is accordingly measurable in terms of attitudes held towards those persons and groups. It was postulated that such attitudes exert a directive influence on behavior, and that these attitudes influence that learning which is related to these persons and groups.

On the basis of this proposition, two hypotheses were formulated for testing:

1. That individuals for whom the occupational role of the main character of the motion picture had a high prestige value would

- a. learn more factual information from the film, and
- b. change further, in attitudes in the direction suggested by the film,

than those for whom this occupational role had a low prestige value.

2. That where an established identification with a main character could be assumed to exist, on the basis of institutional affiliation, those people who possessed such institutional affiliation would

- a. learn more, and
- b. change further in attitudes in the direction suggested by the film,

than those who had no such affiliation.

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<sup>1</sup> This report is based on a dissertation submitted in partial fulfillment of requirements for the degree of Doctor of Philosophy, at The Pennsylvania State College, June 1950.

## EXPERIMENTAL DESIGN AND PROCEDURES

A religiously-oriented film, dealing with the role of a Catholic priest, was shown to a sample of college students. Subsamples for two dichotomies - Catholic vs. non-Catholic, and high vs. low prestige status rating for the role of Catholic priest - were each compared with respect to an informational test based on the film, and changes in attitude scores related to the film's "message" of religious tolerance.

### The Motion Picture

The dramatic film, Keys of the Kingdom, starring the well-known actor Gregory Peck, in the well-defined role of Catholic Priest, was selected.

This film depicts the career of a priest who served as a missionary in China, and develops a theme of religious tolerance through the behavior and philosophy of the main character.

### The Tests and Measures

Measures of potentiality for identification. To evaluate the audience's potentiality for identification with the main character of the film, two indices were employed:

- a. A paper-and-pencil rank-order scale of the prestige of the role of Catholic Priest, on which each subject was required to rank, in order of prestige for him, eleven occupations, among which was Catholic Priest.
- b. Affiliation or non-affiliation with the Catholic Church.

Measures of the effects of the film. Three devices were used:

- a. Two alternate forms of a Thurstone-type equal-appearing intervals attitude scale to measure religious tolerance.
- b. An objective-type multiple-choice test on the factual information in the film.
- c. The rank-order scale of occupational prestige.

### The Experimental Population

The population employed included 814 students enrolled in introductory psychology courses at The Pennsylvania State College during the fall semester of 1949-1950.

**Prestige Subsample.** Two groups were selected that were comparable with respect to sex distribution and a measure of scholastic aptitude ( The Pennsylvania State College Moore-Castore Test), and that differed with respect to the mean rank that they assigned to Catholic priests. Every member of the first group ranked the occupation of Catholic Priest 1 or 2 (high prestige end of scale); every member of the second group ranked the occupation 10 or 11 (low prestige end of scale).

**Affiliation Subsample.** Two groups were selected which were similar on the measure of academic aptitude, but which differed according to membership or non-membership in the Catholic Church. From the available population it was not possible to equate these groups by number or sex distribution.

Table I summarizes the matching data for the two groups in each of the two subsamples.

TABLE I  
MATCHING DATA FOR THE PRESTIGE  
SUBSAMPLE GROUPS AND FOR THE  
AFFILIATION SUBSAMPLE GROUPS

Group	No. of Cases	Sex		Moore-Castore		Saw Film Previously
		M	F	Mean	S. D.	
Prestige Subsample						
High Prestige Rankers	100	67%	33%	114.2	23.5	36%
Low Prestige Rankers	100	67%	33%	114.1	23.3	36%
Affiliation Subsample						
Catholics	61	72%	28%	113.4	23.4	36%
Non-Catholics	379	63%	37%	113.4	25.1	34%

#### Experimental Procedure

The rank-order scale of occupational prestige was administered to the total population, followed by one form of the attitude scale on "Religious Tolerance". The motion picture Keys of the Kingdom was then shown.

Then, the same rank-order scale and the alternate form of the attitude scale, as well as the information test based on the film, were given to the total population.



## RESULTS OF THE EXPERIMENT

### The Prestige Hypothesis

The first hypothesis predicted that the group for whom the role of Catholic Priest ranked high in prestige would (1) change more in attitude in the direction suggested by the film than the group for whom the role ranked low in prestige, and (2) would learn more from the film.

The results both for the information test and the attitude scale were in the direction predicted, but the differences between the high rankers and low rankers were not significant. However, the high rankers themselves showed a significant change on the attitude scale, in the predicted direction, while the low rankers showed only an insignificant change. These results are summarized in Table 2.

### The Affiliation Hypothesis

The second hypothesis predicted that those subjects who were affiliated with the church represented by the film protagonist (Catholic) would remember more of the factual content of the film (e. g., the story line) and would change in attitude to a greater extent in the direction suggested in the film, than those subjects who were not affiliated with the Catholic Church.

Table 3 summarizes the comparison of the Catholics with the Non-Catholics on (a) change in prestige ranking of the role of Catholic Priest, (b) change in the direction of greater religious tolerance, and (c) factual learning from the film.

Prestige of role. Both before and after the film the Catholics assigned a significantly higher prestige rank to the role of Catholic Priest than the non-Catholics. For both Catholics and non-Catholics, a significantly higher prestige rank was assigned after the film than before. However, the magnitude of the change in ranking was about the same for both groups; the difference between the scores (pre-test minus post-test) for the two groups was not significant.

This analysis of the ranking results, however, probably does not adequately reflect the differences between Catholics and non-Catholics, since it does not take into account the fact that the Catholics' mean ranking could not change as much as the non-Catholics' ranking on the 11 point scale.

TABLE 2

COMPARISON OF INFORMATION TEST AND ATTITUDE SCALE MEANS  
FOR THE HIGH PRESTIGE RANKERS AND LOW PRESTIGE RANKERS

	N	Information Test		Religious Tolerance Attitude Scale <sup>a</sup>			
		Mean	S.D.	Pre-test Mean	Post-test Mean	Pre-test - Post-test Mean	Difference S.D.
High Rankers	100	46.44	5.47	4.11	3.93	.18	.73
Low Rankers	100	45.35	5.69	4.15	4.06	.09	.68
Difference Between the Groups		1.09 *		.04	.13	.09	

<sup>a</sup> The lower the score, the greater the tolerance

\* Significant at the 17 percent level of confidence

\*\* Significant at the 2 percent level of confidence

TABLE 3

COMPARISON OF CATHOLICS AND NON-CATHOLICS ON THE  
OCCUPATIONAL PRESTIGE AND ATTITUDE SCALES,  
AND ON THE INFORMATION TEST RESULTS

	Catholics	Non-Catholics	Differences Between Catholics and non-Catholics
Number of Cases	61	379	
<b>OCCUPATIONAL RATING SCALE<sup>a</sup></b>			
Pre-test			
Mean	4.31	6.74	2.43**
S. D.	3.78	4.13	
Post-test			
Mean	3.16	5.49	2.32**
S. D.	3.13	4.00	
Pre-test minus Post-test			
Mean difference	1.15**	1.25**	.10
S. D. of differences	2.77	2.97	
<b>RELIGIOUS TOLERANCE ATTITUDE SCALE<sup>b</sup></b>			
Pre-test			
Mean	4.22	4.12	.10
S. D.	.60	.63	
Post-test			
Mean	4.05	3.93	.12
S. D.	.73	.61	
Pre-test minus Post-test			
Mean difference	.17	.19	.02
S. D. of differences	.75	.65	
<b>INFORMATION TEST</b>			
Mean	46.69	45.25	1.44*
S. D.	5.36	5.79	

a A low rating indicates high prestige

b A low score indicates greater tolerance than a high score

\* Significant at the 6 per cent level of confidence

\*\* Significant at the 1 per cent level of confidence



**TABLE 4**

**COMPARISON OF CHANGE OF ATTITUDE TOWARD CATHOLIC  
PRIEST OF CATHOLIC AND NON-CATHOLIC SUBGROUPS, IN TERMS  
OF PERCENTAGE OF POSSIBLE CHANGE**

Group	Mean-ranking on Pre-test	Mean-ranking on Post-test	Diff. (Actual Change)	Pos- sible Change	Percent of Possible Change
Catholic	4.312	3.164	1.148	3.31	34.68
Non-Catholic	6.739	5.486	1.253	5.74	21.83

Low scores represent high prestige. Maximum prestige on scale is represented by a score of 1.

To take into account this ceiling effect of the ranking scale, the actual changes of the Catholic and Non-Catholic groups may be compared with the amount of change possible in the direction of greater prestige ranking of the role of Catholic Priest. Maximum prestige on the scale is represented by a score of 1. This comparison is shown in Table 4.

The Catholic group had a score of 4.31 on the pretest; the extent of possible change was 3.31. The actual change was from 4.31 to 3.16, or 1.15 which was about 35% of the possible change. The Non-Catholic group changed from 6.74 to 5.49, or 1.25 score points out of a possible 5.74 score points. The change for the Non-Catholic group was therefore only about 22% of their possible change. The percent of possible change is therefore greater for the Catholic group. This is in accord with the hypothesis of this study that the Catholics would change more in attitude than Non-Catholics as a result of seeing this film.

Religious Tolerance Attitude Change. The "Religious Tolerance" scale showed no significant difference between the groups, in amount of attitude change. (Table 3.)

Information Test. Catholics remembered more about the film action than did non-Catholics, but by an amount that was barely significant (at the 6 per cent level of confidence.).

### CONCLUSIONS

The results of this study are interpreted to lend support to the proposition that established attitudes towards a film's protagonist and theme are factors of importance to be considered in the learning process.

This study suggests that it is possible to make a differential predication of learning from a motion picture by means of measures of attitudes toward characteristics of the main character which serve as indices of the potentiality for identification with the main character.

The study also suggests that knowledge of an intended audience's identifications with (positive attitudes toward) persons and groups, can give major clues concerning the characteristics that should be exhibited by the main character of a motion picture in order to facilitate learning of the information and acceptance of the ideas presented in the motion picture.